Jumanje

PTO/SB/21 (08-03)

Approved for use through 08/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
approved for use through 08/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
approved for use through 08/30/2003. OMB 0651-0031

	Application Number	10/735,110
TRANSMITTAL	Filing Date	December 12, 2003
FORM	First Named Inventor	Pawan K. Nimmakayala
(to be used for all correspondence after initial filing)	Art Unit	Unassigned
	Examiner Name	Unassigned

	Examiner Name Unassigned	
Total Number of Pages in This Submission	Attorney Docket Number	P122/MII-94-69v18
	ENCLOSURES (Check all that	apply)
Fee Transmittal Form Fee Attached Amendment/Reply After Final Affidavits/declaration(s) Extension of Time Request Express Abandonment Request Information Disclosure Statement Certified Copy of Priority Document(s) Response to Missing Parts/ Incomplete Application Response to Missing Parts under 37 CFR 1.52 or 1.53	Drawing(s) Licensing-related Papers Petition Petition to Convert to a Provisional Application Power of Attorney, Revocation Change of Correspondence Addre Terminal Disclaimer Request for Refund CD, Number of CD(s) Remarks	After Allowance communication to Technology Center (TC) Appeal Communication to Board of Appeals and Interferences Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) Proprietary Information Status Letter Other Enclosure(s) (please Identify below): Form 1449 - IDS Eighteen (18) References Return Receipt Postcard to Kenneth Brooks
SIGNA	TURE OF APPLICANT, ATTORNE	EY, OR AGENT
Firm or Individual name Signature Date Law Office of Kenneth C.	Brooks	
4/1/19		
C	ERTIFICATE OF TRANSMISSION	/MAILING
sufficient postage as first class mail in an er the date shown below.	eing facsimile transmitted to the USPTO or velope addressed to: Commissioner for Pat	deposited with the United States Postal Service with ents, P.O. Box 1450, Alexandria, VA 22313-1450 on
Typed or printed name Alexis Sheffield		
Signature Alexa 8	Cellida	Date April 1, 2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Nimmakayala et al. PATENT APPLICATION
Serial No.: 10/735,110 Group Art Unit: Unassigned
Filing Date: December 12, 2003 Examiner: Unassigned

For: MAGNIFICATION CORRECTION EMPLOYING OUT-OF-PLANE

DISTORTION OF A SUBSTRATE

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents Alexandria, VA 22313

Sir:

The following information is submitted in compliance with Applicants' duty of disclosure under 37 C.F.R. § 1.56. Form PTO-1449 and a copy of each reference recited below accompanies this document. It is respectfully requested that the cited information be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

ISSUED PATENTS

Patent Number	Inventor	<u>Grant Date</u>
5,669,303	Maracas et al.	09/23/1997
6,334,960	Willson et al.	01/01/2002
6,696,220	Bailey et al.	02/24/2004

PENDING PATENT APPLICATIONS

Serial Number	Inventor	Filing Date
10/136,188	Voisin	05/01/2002
10/194,414	Sreenivasan et al.	07/11/2002
10/194,991	Sreenivasan et al.	07/11/2002
10/293,224	Choi et al.	11/13/2002

10/293,919	Voisin	•	11/13/2002
10/316,963	Choi et al.		12/11/2002
10/614,716	Choi et al.		07/07/2003
10/788,700	Sreenivasan		02/27/2004

PATENT APPLICATION PUBLICATIONS

Publication No.	Inventor	Publication Date
US 2002/0094496	Choi et al.	07-18-2002
US 2003/0093122	Choi et al.	07-18-2002

FOREIGN PATENT DOCUMENTS

Document Number	Inventor	Pub. Date	
WO 01/69317	Montelius et al.	09/20/2001	

NON-PATENT DOCUMENTS

Krug, Herbert et al. "Fine Patterning of Thin Sol-Gel Films,"
 Journal of Non-Crystalline Solids, 1992, 447-450.

Krauss, et al. "Fabrication of Nanodevices Using Sub-25nm Imprint Lithography," Appl. Phys. Lett., 67(21), 3114-3116, 1995.

M. et al., "Step and Repeat UV-Nanoimprint Lithography: Material Issues," Nanoimprint and Nanoimprint Technology Conference, San Francisco, December 11-13, 2002.

Johnson et al., "Advances in Step and Flash Imprint Lithography, "SPIE Microlithography Conference, February 23-28, 2003.

CERTIFICATE OF MAILING Submitted, I hereby certify that this paper (along with any paper referred to as being attached or

enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: PATENT APPLICATION,

Patents,

Commissioner Alexandri

Typed: Alexis
Date:

Date: April 1

Respectfully

Kenneth C'. Brooks

Reg. No. 38393

P.O. Box 81536

Austin, Texas 78708-1536

Telephone: 512-527-0104 Facsimile: 512-527-0107 patentsrus@earthlink.net **→** +

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 4

spond to a collection of information unless it displays a valid OMB control number.				
Complete if Known				
Application Number 10/735,110				
Filing Date	12/12/2003			
First Named Inventor	Nimmakayala et al.			
Group Art Unit	Unassigned			
Examiner Name	Unassigned			
Attorney Docket Number	P122/MII-94-69V18			

				U.S. PATENT DOCUMEN	15	
Examiner Initials*	Cite No.1	U.S. Patent Document Kind Code ² Number (<i>if known</i>)		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	C1	5,669,303		Maracas et al.	09-23-1997	
	C2	6,334,960		Willson et al.	01-01-2002	
	C3	6,696.220		Bailey et al.	02-24-2004	
						•
	-					
	+++					
		-				
Examiner Signature					Date Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO				Complete if Known		
				Application Number	10/735,110	
IN	FORMATION I	DISC	LOSURE	Filing Date	12/12/2003	
STATEMENT BY APPLICANT				First Named Inventor	Nimmakayala et al.	
				Group Art Unit	Unassigned	
(use as many sheets as necessary)			cessary)	Examiner Name	Unassigned	
She	2	of	4	Attorney Docket Number	P122/MII-94-69V18	

FOREIGN PATENT DOCUMENTS									
Examiner Initials*	Cite No.1	Office ³	Foreign Patent Docum Number ⁴	ent Kind Code⁵ (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T	
	C4	wo	01/69317		Montelius et al.	09-20-2001			
			-						
			<u> </u>					Τ	
								T	
			1		·				
								Ī	
								T	
								Т	
								T	
	1				1111			1	
								T	
								T	
								\top	
								\top	
								\top	
		1	•					Τ	
								\top	
								T	
								T	
			-					T	
								T	
	1							T	
								1	
								T	
	1							T	
								1	
			*				· · · · · · · · · · · · · · · · · · ·	T	
		T - T					· · · · - · · · · · · · · · · · · · · ·	T	
	 	† †						\top	

Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substit	tute for form 1449B/P	то		Complete if Known		
				Application Number	10/735,110	
INF	ORMATION	DISC	CLOSURE	Filing Date	12/12/2003	
STA	ATEMENT B	Y AP	PLICANT	First Named Inventor	Nimmakayala et al.	
				Group Art Unit	Unassigned	
	(use as many shee	ts as ne	ecessary)	Examiner Name	Unassigned	
Sheet	3	of	4	Attorney Docket Number	P122/MII-94-69V18	

OTHER PRIO	R ART –	NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C5	KRUG et al., "Fine Patterning of Thin Sol-Gel Films," Journal of Non-Crystalline Solids, 1992, pp. 447-450, vol. 147 & 148.	
	C6	Krauss et al., "Fabrication of Nanodevices Using Sub-25nm Imprint Lithography," Appl. Phys. Lett 67(21), 3114-3116, 1995	
	C7	CHOI et al., "Method and System of Automatic Fluid Dispensing for Imprint Lithography Processes," U.S. Patent Application Publication 2002/0094496. Published on July 18, 2002.	
-	C8	CHOI et al., "Methods for High-Precision Gap and Orientation Sensing Between a Transparent Template and Substrate for Imprint Lithography," U.S. Patent Application Publication 2003/0093122. Published on July 18, 2002.	
	C9	VOISIN, "Methods of Manufacturing a Lithography Template," U.S. Patent Application 10/136,188, Filed with USPTO on May 1, 2002.	
	C10	SREENIVASAN et al., "Step and Repeat Imprint Lithography Systems," U.S. Patent Application 10/194,414. Filed with USPTO July 11, 2002.	
	C11	SREENIVASAN et al., "Step and Repeat Imprint Lithography Processes," U.S. Patent Application 10/194,991. Filed with USPTO July 11, 2002.	
	C12	OTTO M. et al., "Step and Repeat UV-Nanoimprint Lithography: Material Issues," Nanoimprint and Nanoprint Technology Conference, San Francisco, December 11-13, 2002.	
	C13	JOHNSON, et al., "Advances in Step and Flash Imprint Lithography, " SPIE Microlithography Conference, February 23-28, 2003.	
	C14	CHOI et al., "A Chucking System and Method for Modulating Shapes of Subtrates," U.S. Patent Application 10/293,224. Filed with USPTO on November 13, 2002.	
	C15	CHOI et al., "A Method For Modulating Shapes of Substrates," U.S. Patent Application 10/316,963. Filed with USPTO on December 11, 2002.	

	· 		
Examiner		Date	
Signature		Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitu	ite for form 1449B/PT	О		Complete if Known	
				Application Number	10/735,110
INF	ORMATION I	DIS	CLOSURE	Filing Date	12/12/2003
STA	TEMENT BY	/ AF	PPLICANT	First Named Inventor	Nimmakayala et al.
				Group Art Unit	Unassigned
_	(use as many sheets	s as n	ecessary)	Examiner Name	Unassigned
Sheet	4	of	4	Attorney Docket Number	P122/MII-94-69V18

OTHER PRIC	OR ART - I	NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		VOISIN, "Methods of Inspecting A Lithography Template," U.S. Patent Application 10/293,919. Filed with	
	C16	USPTO on November 13, 2002	
		CHOI et al., "A Conforming Template For Patterning Liquids Disposed On Substrates," U.S. Patent	- -
	C17	Application 10/614,716. Filed with USPTO on July 7, 2003.	
	1	SREENIVASAN et al., "Full-Wafer or Large Area Imprinting with Multiple Separated Sub-Fields for High	-
	C18	Throughput Lithography," U.S. Patent Application 10/788,700. Filed with USPTO on February 27, 2004.	
		• • • • • • • • • • • • • • • • • • • •	
	 		-
			-
 			+
			+

Considered	 Date	" " 	Examiner
Signature	 Considered		Signature

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.